

# **FROM THE ECOLOGY OF THE HUMAN SPIRIT TO THE DEVELOPMENT OF THE ORCHESTRAL THEORY OF COMMUNICATION: THE INCLUSION OF THE MEDIUM-MESSAGE AXIOM**

**Maria da Conceição de Oliveira Lopes**

*University of Aveiro (PORTUGAL)  
col@ua.pt*

## **Abstract**

The contributions of the biologist, anthropologist and communication theorist Gregory Bateson (1904-1980) form the nucleus of the cross-disciplinary theoretical principles which led to the founding of the web of thought spun by Watzlawick, Weakland, Beavin, Fish, Jackson, Erickson, Foster, Haley and Satir, amongst others. These authors were united by a common theoretical standpoint which foregrounded the ecology of the human spirit and saw communication as process, a system of transactional interaction. They were also similarly influenced by cybernetics, systems theory and constructivism. Energised by the clash of the ideas in their exchanges, they constructed the orchestral theory of communication, formalised by Paul Watzlawick, Donald Jackson and Janet Beavin. Today, Watzlawick (1967) is regarded as a seminal publication in the annals of interpersonal communication studies.

Moving beyond the confines of the original object of study – face-to-face communication – this theory has been increasingly applied to the analysis of institutionally mediated communication and to the understanding of the construction of learning and change in organisations. However, in current circumstances, its set of axiomatic principles would benefit from the inclusion of a medium-message axiom to allow a fuller understanding of the realities of the mediated communication process that the process contains. This paper proposes the inclusion of this new axiom, medium-message; a proposal which is based on the work of Gregory Bateson, the ecology of the human spirit, the orchestral theory of communication and the thinking of the Media Ecology Association. It aims to help build a more profound insight into the realities of the process of human communication.

Keywords: ecology of the human spirit, communication, learning, change, message, medium.

## **1 THE ECOLOGY OF THE HUMAN SPIRIT: THE META-PATTERN THAT HOLDS EVERYTHING TOGETHER**

Following the trend of thinking of communication as an open system, Bateson asserts that the human creature is one of many systems in the biosphere, is autonomous, sensitive, self-organised and homeostatic. The sum total of this being consists of interacting subsystems in functional and dysfunctional connection, whether internal or external, given that it has systemic properties that are common to all living beings, with which it exists in a permanent state of interdependence. The world, in Bateson's view, is a fully integrated whole.

The ecology of the human spirit is the product of a physical structure, the spirit (the mind) and is immanent rather than transcendent. In common with all physiological processes, it operates through differentiated logical levels of learning which assimilate chance occurrence. To accept the fact that the world is no longer a predictable fact is a consequence. Thus, "we cannot describe (the spirit) without presupposing the presence of physical structures within which it can manifest itself" [1]. Nor is it possible "to describe what is happening in organisms, societies or other ecosystems without thinking in terms of communication, organisation and the reaction to differences [1].

According to Bateson, the ecology of the human spirit is a holistic set wrought from a number of components that exchange information and energy and which are based on the interaction and interrelation of those differences which constitute the human ecosystem. For example, the respiratory, nervous, cardiovascular, urinary and sexual systems are structured systems that exchange information and energy within themselves, between themselves and with the whole human system as

well as at their boundaries with the biosphere. Such interactions are interconnected [2] to form an indivisible whole. The author offers six criteria in defining the human spirit: thought, development, ecology, life, learning and the instigation of events and the ability to check/evaluate these, which also allows human beings to be distinguished from other living beings. In this sense, we may state that the ecology of the human spirit is the meta-pattern that interweaves the sum of the connections between the various living systems.

## **2 THE SELF IS A CO-CONSTRUCTED ENTITY: LEARNING AND CHANGE**

In emphasising the second law of thermodynamics, each culture's values system, communication between cultures, the relations and interactions between biological ecosystems and the nature of the multiple interactions and relations between human beings and the environment, Bateson postulates that the self is an entity that results from a discontinuous process of learning and change, inseparable from the contexts in which it is socialised. This learning is not of the linear stimulus-response type but is, rather, determined by a hierarchical structure [2]. It arises from the increased redundancy between that which is learned and the environment in which this occurs. In this sense, he identifies four logical and increasingly complex levels of learning from level 0 to level III [2].

0 learning is linear and of the cause-effect type (and reflects our most common usage of the word 'learning'). I learning corresponds to a change in the specificity of the response given in 0 type learning. II learning – learning to learn – reflects a change in the level I learning process, whether this arises from correction applied within the universe of possibilities from which a choice is made or from a change that is made to the way in which the experience of the sequence is effected. III learning – learning how one learned to learn – derives from a change made to the II learning process. It is manifested in an awareness of the models acquired during II learning. The individual reconstructs type II learning experiences and modifies or redirects these and learns to understand and react as a function of context. Identity – the self – merges with all relational processes and a vast ecology or aesthetics of cosmic interaction and is accompanied by the reconstruction of a new reality and a redefinition of the self and the world.

If learning is the result of a discontinuous process organised into logical levels of differentiated complexity then implicit to change is the slow process of learning that leads to re-contextualisation and brings about the change.

Nevertheless, the practical processes of change are different. According to Paul Watzlawick, type I corresponds to a partial change in one or more components of the personal system, such as moving house or changing school. Type II produces a complete change in the same system. For example, going to university, moving out of home and away from the family or the death of a loved one.

Learning and change are the essence of communication and are part of the relational dynamics between the protagonists of a given situation. Thus, they exchange information, create meanings, redundancies and new models for action. In other words, they construct messages that reduce uncertainty and control the unpredictability of the outcomes of their behaviours.

## **3 ORCHESTRAL COMMUNICATION THEORY**

The theories put forward by Gregory Bateson are reaffirmed by Paul Watzlawick, Donald Jackson and Janet Beavin [3] in their setting out of the orchestral theory of communication. They reiterate that communication is a human condition and that it occurs prior to any of its manifestations or effects. Twenty-eight years later, Cronen and Sigman [4] confirm the consequential nature of communication. Watzlawick et al.'s [3] orchestral theory of communication, holding to Bateson's [5] postulates, situates itself in the field of pragmatics where it incorporates verbal language as one of the subsystems of communication and emphasises the various languages of communication, specifically the non-verbal. Activity, inactivity, silence, expectations, territoriality and temporality are all imbued with meaning and intervene in the co-construction of the message. On reverting to this original meaning of the word communication: to make common, to be in relation and involving the sharing of meanings, they extol contextual analysis rather than analysis of the transmitted verbal content and define communication as "a system of multiple channels in which the social actor is constantly engaged, whether or not he so wishes, through his gestures, his gaze, his silence and even his absence [6]. This logic of communication focuses on the analysis of the effects of the interaction and interrelations at work in the ecology of the human spirit of the situated participants.

For the authors of orchestral communication theory, communication is an open system and process, Watzlawick et al. [3], and they offer a set of axioms that give equal value to both the verbal and non-verbal components of this. Implicit to the axiom of the impossibility of not communicating is the consideration that all behaviour has value as a message and the authors emphasise that information is taken in even when the person in question indicates that he does not wish to communicate. Thus, just as non-behaviour cannot exist, nor can non-communication. Communication influences behaviour and this is a pragmatic effect of communication. In relation to the second axiom, Watzlawick et al. [3] abandon the label of schismogenesis, substituting it with symmetry and complementarity. This axiom plays an essential role in maintaining healthy relationships between human beings and both components should be present, in mutual alternation, or operating in different transactions according to the roles and functions being carried out by the participating humans. Symmetry favours similarities and minimises differences while complementarity tends to maximise differences and minimise similarities. This means that human beings relate symmetrically in some relationships and complementarily in others. The judicious exercise of both is critical to the affirmation of identifying images of the self [7]. The content and relation axiom is not limited to the transmission of information in the communicational context but also, simultaneously, induces a behavioural given [7]. Given this, the message weaves relation and content, constituting these at the two levels of communication. The modes of communication, analogue and digital, axiom defines the existence of two languages that exist in the communication process. The digital is of the order of the content and is, thus, representative and the analogue is of the order of the relation and so is appresentative [7]. In their socialising, humans use these two modes of communication. The meta-communication axiom describes a regulatory function. That is, it gives information to the situated protagonists on the information involved, furnishing instructions in terms of content and the relationship experienced. It is as if the protagonist were simultaneously in the audience witnessing the performance that he is giving on stage. It is thanks to meta-communication that the situated participants are able to determine, in the context in which they are immersed, the meaning that is being attributed to their message and to rectify these latter accordingly. In the punctuation of the sequence of interactive facts axiom there are three distinct modes of punctuation: how the protagonists segment the sequence of transactions; how the sequence is segmented; and the version that each one holds in relation to their own behaviour and the interpretation they give to the behaviour of the other.

#### **4 DISTORTIONS IN COMMUNICATION ASSOCIATED WITH EACH AXIOM**

These distortions reflect the disturbances that occur in the communication process. When there is no positive bonding with the other human being, a distortion occurs. In this relational context the situated protagonists produce, in conjunction, a set of disturbances that generate misunderstandings, resentment, incomprehension and aggression. The disturbance related to the impossibility of not communicating occurs when the human being avoids or flees from the ethical commitment that the communication process involves. There are six types: passive acceptance or aversion, rejection, somatisation, disqualification and tangentialisation.

The distortion relating to the levels of communication, content and relationship results from the confusion seen between the relationship and content made by the interlocutors. On communicating, human beings offer up a definition of themselves and of their relationship. If one human being accepts and agrees with the proposition made by the other, he confirms the image formed by the former and face is met by both participants. If this is not the case, the lack of confirmation may result in rejection, disavowal and denial of the existence of the other.

The distortion associated with these modes of digital and analogue communication relates to errors made in interpreting both digital and analogue information. The analogue mode invokes the relationships existing between the human beings who translate the rules of their relationship. The digital mode has a logical syntax at the content level whilst the analogue mode is lacking in any such syntax and is more ambiguous. Thus, in translating the analogue language into digital it is necessary to introduce the functions of logical truth that are absent from analogue language. The authors emphasise this absence, as exemplified by use of the word "no". It is easy to transmit the analogue message "I am going to shove you", it is very hard to signal "I am not going to shove you". According to the authors, the occurrence of translation errors results in the partial loss of the ability to meta-communicate digitally about the contingencies of the relationship which becomes corrupted and may then rupture or even terminate.

As regards the distortion relating to discordant punctuation, this is manifest when one of the interlocutors, on introducing discord into the method used to punctuate the interaction, generates a

conflict in which the first participant claims he is a victim of the behaviour of the second who, in turn, blames the first for the outcome. Generally, discordant punctuation reveals the existence of problems in the relationship and is only through meta-communication that the situated protagonists are able to get out of the vicious circle in which they find themselves. The distortion relating to the nature of the interaction and the interrelationship axiom: symmetry and complementarity [7] cannot be seen from a value judgement point of view, where one is "good" and the other "bad". Both are indivisible and there are two models of relationship and interaction at work here. The occurrence of a distortion to one of these models may upset the relationship of the two forms. For complementarity, this would be through the transformation of difference into inequality/oppression. For symmetry, it would be through the transformation of similarities into rivalry/competition or, even, in the rigidifying of both models which could lead, amongst other results, to the stagnation of the relationship. It should also be mentioned that this pathology is associated with the abuse of power, as manifested through manipulation or the submission to manipulation, victimisation. The distortion linked to the meta-communication axiom arises from the impossibility of meta-communicating. If there should be an error in communication and where it is impossible to meta-communicate, or this is blocked, the communicating protagonists will enter into distortions that amplify the problem and may irredeemably affect the continuation of their relationship. Finally, there is the pathology of paradoxical communication. According to Bateson, this kind of pathology may occur with some frequency in the daily lives of those human beings who have, at one time or another, communicated in this way or been the target of communicative situations of this type. A message is paradoxical when it communicates two incompatible contents at the same time. If someone is told to "be spontaneous", then this someone, on obeying the order, is not being spontaneous but if they do not obey it then also have no way of resolving the difficulty into which they have been placed. There are three types of paradox [7], amongst which the pragmatic is of particular significance since it is these paradoxes that have the greatest implications for the behaviour of those at whom they are directed. They may be subdivided into paradoxical injunctions and double bind paradoxical injunctions. The first of these contain just such a contradiction that the target of the paradox has no way of satisfactorily resolving it. Paradoxical predictions consist in communicating a message about which it is not possible to make any pragmatic decision. That is, the individual is forced to make a prediction that cannot come true (for example: a teacher says that there is going to be a test but says she doesn't know on which day it is going to be. These two predictions are mutually exclusive: the teacher has made a prediction that is not predictable).

The double bind paradoxical injunction [8] has characteristics that may be revealed through the following example. Two individuals are involved in an intense relationship in which there is, for one or for both, a high degree of interdependence for both physiological and psychological survival. One of the individuals is victim and the other aggressor. A message contains two mutually exclusive affirmations and the victim, in order to comply with the message is also forced not to comply. The victim cannot exit from the situation and does not have recourse to meta-communication that might allow withdrawal. It is not possible to react nor is it possible not to react and thus the victim is subject to a paradoxical injunction. Isolated instances of double bind situations may not endure, may be circumstantial or may be permanent. The double bind becomes fact and imposes paradoxical behaviour on the victim who then becomes the model for communication, thus self-perpetuating the situation which he engendered. The victim learns to construct reality and organise the world using double bind schemes. [9]

## **5 THE INCLUSION OF THE NEW MEDIUM-MESSAGE AXIOM**

The learning theory that influenced the formalisation of the orchestral theory of communication, as presented here, is firmly rooted in the ecology of the human spirit. It is clear that this theory is highly relevant to the analysis of the interpersonal communication process and that it now needs to be carried forward with the inclusion of a new axiom, that of medium-message, in order to fully account for the realities of the process as it stands today. The effects of the mediations instigated by new technologies, and by communication media, on people's daily lives are more clearly visible today than ever before. This communication is mediated by technologies and by mass communication media. The medium-message axiom covers the uses of the various media and the messages that users construct on the basis of these. Any context will modify ways of thinking, acting and interpreting the world [10], with media convergence to create the "Global Village" [11] through the internet being an example of this. McLuhan's anthropological view of the medium, in which the "medium is the message" [12] is inspiring. This aphorism is intended to allow more emphasis on the effects of the medium and less on the contents they deliver. The Media Ecology Association school of thought suggests an approach to the connection between the various aspects of the communication process

(face-to-face, mediated, quasi-mediated [13]) and the establishment of an interaction between the three fields of study, media, technology and language, in which these should be thought of as elements of the human ecosystem [14]. Robert Logan's critical reflection on the issue introduces a distinction between media and technology in which technology includes not just the machine (hardware) but also all forms of processing communication and information, including discourse, writing, mathematics, science and computation [14]. He also postulates the existence of interactions between language, technology and medium, emphasising that language is also a technology and a medium.

From this perspective, interception in the analysis, of the axioms relating to the digital and analogue communication modes and the levels of communication, relation and content, also supports the idea put forward by Logan, that language is a technique and a medium. Nevertheless, given that the ecological approach contradicts the traditional media studies view that investigative methodology is based on a linear analysis of the effects of the media, specifically those resulting from the matrix work of Lasswell [15] or Lazarsfeld [16], it is important to somewhat emphasise the context in which the proposed medium-message axiom is to be situated.

The growing naturalisation of the media (classic and new) makes them increasingly indispensable in our everyday lives as well as increasingly invisible. They expand the central nervous system, carry out quasi-mediated interaction and encourage the development of tribal-like socialisation patterns [17]. They are like a third skin, without which it would be hard to socialise and from which it is hard to be excluded. These media are integrated into our lives and shape our behaviours. The internet serves as one example of the potential to enlarge social networks that have been constructed face-to-face. If, on the one hand, these media reduce the level of sensorial involvement in the human experience, they broaden and complement our activity, on the other, by making possible a quasi-mediated meeting of users' minds, configuring messages that users co-construct on the basis of the perceptions that the media configure. The systemic and humanist perspective of media studies, in the understanding of the effects on human behaviours, is to be found in the works of Media Ecology Association authors such as Lance Strate [18] [19] and Robert Logan [14] (who emphasise the connectivity of the media and the interconnection between medium-technology and language).

As regards the message, it is understood that it is for usage reasons that it is delivered to the medium that constructs the message. This statement refers to the need to clarify, for information and message alike, that the relevance that they have to the communication makes it necessary to establish a distinction between them. The information is a component of the communication that can be acted upon at the time of decoding and then interpreted, thus producing the message. For example, a page in a newspaper does not, of itself, contain any information for anybody who does not know how to read. However, when it is read it may be interpreted and transformed into a message.

According to Bateson, the information is the material component of the communication process that designates the content of that which we transact and by which we wish to be understood. As stated above in relation to learning and change, information is closely associated with the redundancy that boosts the probability of successful communication. The information is a sequence of signals transacted (decoded) between situated protagonists that, once symbolically shared, transforms itself into message.

Construction of the message is linked to persuasion and involves a number of factors, amongst which are the credibility of the communicator (as defined by ethical demands, relational aesthetics and level of knowledge). The credibility of the communicator relates not to the quantity of information exchanged but to the recognition extended to the communicator who encourages inter-comprehension, the ideal target of all human communication.

## **5.1 Some distortions associated with the medium-message axiom**

Finally, there are a number of possible distortions associated with the axiom in question. i) The view that is taken of both the medium (as technology or as a message itself) and the message constructed by the user who interprets the information on the basis of his world view; ii) the confusion arising between the understandings that the medium is both information and message; iii) the confusion between the construction of the message (resulting from the symbolic interaction) and not the instrumental interactivity that the medium may instigate; iv) the confusion instilled by the fragmentation of the digital mode of communication, generalised in discourse on the instrumental approach of the medium which, thus, disassociates this from the analogue mode of communication.

The viewpoint taken here is that the medium is a set of media devices. The message is the result of the comprehension or interpretation work put in by the user or users, in this context, on the media and the level of learning and change.

To finish, it is claimed here that this axiom of the orchestral theory of communication may effectively contribute to analysis of concrete experiences of the relationship, and the effect, the media has with human behaviour, and so contribute to a better understanding of the ecology of the human spirit.

## REFERENCES

- [1] Bateson, M.C. (1988). Comment a germé Angels fear. In Y. Winkin, (Ed.), Bateson: premier état d'un héritage. Colloque de Cerisy. Paris : Seuil, p. 29.
- [2] Bateson, G. (1987). Natureza e Espírito. Lisboa. Publicações Dom Quixote, p. 71; pp.87-88.
- [3] Watzlawick, P., Jackson, D., Beavin, Janet (1967). Pragmatics of Human Communication - A Study of Interactional Patterns, Pathologies and Paradoxes, New York: W. W. Norton.
- [4] Cronen, V. (1995). Coordinating Management of Meaning: The Consequentiality of Communication and the Recapturing of Experience. In The Consequentiality of Communication, Edited by Stuart j. Sigman. Lawrence E. Association.
- [5] Bateson, G. (1977). Vers Une Écologie de L' Esprit.'Tome I. Paris: Seuil, pp. 120-139.
- [6] Winkin, Y. (eds.) (1981). La Nouvelle Communication, Paris: Seuil, pp. 7-8.
- [7] Watzlawick, P. et al. (1993). Pragmática da Comunicação Humana – um estudo dos padrões, patologias e paradoxos da interação. S. Paulo. Editora Cultrix (tradução obra [3] (1967)).
- [8] Bateson, G., Jackson, D., Haley, J., Weakland (1956). Toward a Theory of Schizophrenia. Behavioral Science. 1: 251-264. 1956.
- [9] Wittezaele, J. J.; Garcia, T. A. (1992). La recherche de l'école de Palo Alto. Paris: Seuil, pp. 166-202.
- [10] McLuhan, M. (1964). Understanding Media: The Extensions of Man. New York: McGraw Hill.
- [11] McLuhan, M. (1968). War and Peace in the Global Village. New York: Bantam Books.
- [12] McLuhan, M. (1967). The Medium is the Message: An Inventory of Effects. New York: Bantam Books
- [13] Thompson, J. (2001). A mídia e a modernidade - Uma teoria social da mídia. Petrópolis: Editora Vozes.
- [14] Logan, R. K. (2004). The Alphabet Effect: A Media Ecology Understanding of Western Civilization. Cresskill, NJ: Hampton Press, p. 30.
- [15] Lasswell, H. (1948). The Structure and Function of Communication in Society. In Lyman Bryson (ed.), The Communication of Ideas. Harper and Row.
- [16] Lazarsfeld, P.; Berelson, B.; Gaudet, H. (1948). The people's choice. NY: Columbia University Press.
- [17] Rodrigues, A.D. (1989). Estratégias da Comunicação. Lisboa: Presença, p.95.
- [18] Lance Strate (2006). Echoes and Reflections: Cresskill, NJ: Hampton Press.

- [19] Lance Strate, Ron Jacobson, and Stephanie Gibson (Eds.). (2003). Communication and Cyberspace: Social Interaction in an Electronic Environment (*2nd ed.*). Cresskill, NJ. Hampton Press.